

WHAT IS CLAIMED IS:

1. A method of classifying a communication in an application infrastructure comprising:
 receiving a communication from the application infrastructure, wherein the communication includes a packet;
 examining the communication; and
 prioritizing the communication based on the examination.
2. The method of claim 1, wherein the packet is prioritized based on a protocol, a source address, a destination address, a source port, a destination port, or any combination thereof.
3. The method of claim 2, wherein prioritizing the packet further comprises associating the packet with one of a set of application specific flows.
4. The method of claim 3, wherein associating the packet is accomplished using a stream label mapping table, wherein an entry in the stream label matching table maps the packet to an application specific flow.
5. The method of claim 4, wherein the set of application specific flows includes types of traffic.
6. The method of claim 5, further comprising determining an action based on the application specific flow associated with the packet.
7. The method of claim 6, wherein the action includes at least

one of drop, meter, and inject.

8. The method of claim 3, further comprising assigning an application weighted random discard value to the packet, based on the application specific flow associated with the packet.

9. The method of claim 8, wherein assigning an application weighted random discard value is based on a stream rate.

10. The method of claim 9, further comprising discarding the packet based on the application weighted random early discard value.

11. The method of claim 10, wherein the application weighted random early discard value is based on contention level for a port and a control value associated with the application stream.

12. The method of claim 11, wherein the control value is on a logarithmic scale.

13. The method of claim 3, further comprising assigning a latency and a priority to the packet based on the application specific flow, and forwarding the packet to a local component based on the latency and the priority.

14. An apparatus for implementing the method of claim 1.

15. A data processing system readable medium having code for classifying a communication in an application infrastructure, wherein the code is embodied within the data processing system readable medium, the code comprising instructions for:

receiving a communication on the application infrastructure, wherein the communication includes a packet;
examining the communication; and
prioritizing the communication based on the examination.

16. The data processing system readable medium of claim 15, wherein the packet is prioritized based on a protocol, a source address, a destination address, a source port, a destination port, or any combination thereof.

17. The data processing system medium of claim 16, wherein prioritizing the packet further comprises associating the packet with one of a set of application specific flows.

18. The data processing system readable medium of claim 17, wherein associating the packet is accomplished using a stream label mapping table, wherein an entry in the stream label matching table maps the packet to an application specific flow.

19. The data processing system readable medium of claim 18, wherein the set of application specific flows include types of traffic.

20. The data processing system readable medium of claim 19, further comprising instructions translatable for determining an action based on the application specific flow associated with

the packet.

21. The data processing system readable medium of claim 20, wherein the action includes at least one of drop, meter, and inject.

22. The data processing system readable medium of claim 17, further comprising instructions translatable for assigning an application weighted random discard value to the packet, based on the application specific flow associated with the packet.

23. The data processing system readable medium of claim 22, wherein assigning an application weighted random discard value is based on a stream rate.

24. The data processing system readable medium of claim 23, further comprising instructions translatable for discarding the packet based on the application weighted random early discard value.

25. The data processing system readable medium of claim 24, wherein the application weighted random early discard value is based on contention level for a port and a control value associated with the application stream.

26. The data processing system readable medium of claim 25, wherein the control value is on a logarithmic scale.

27. The data processing system readable medium of claim 17, further comprising instructions translatable for assigning a

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latency and a priority to the packet based on the application specific flow, and forwarding the packet to a local component based on the latency and the priority.